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[54] METHOD FOR MAKING FIBER-OPTIC BUNDLE COLLIMATOR ASSEMBLY

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[58] Field of Search 385/74, 78, 35, 900, 385/64, 82, 54, 174, 33

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[57] ABSTRACT

A method for making a fiber-optic bundle collimator assembly, comprising the steps of assembling side by side a multiplicity of first bodies of cylindrical configuration and equal diameter and applying uniform compressive force to the first bodies to force the first bodies into a predictable hexagonal pattern of minimum diameter. Additional bodies of cylindrical configuration and having diameters equal to the diameters of the first bodies are inserted on each of the sides of the bundle of first bodies with each of the additional bodies abutting two of the first bodies. A plurality of the first bodies is then removed from the bundle. Each of the removed first bodies is replaced with a pair of cylindrically-shaped second bodies having diameters equal to the diameters of the first bodies, with one of the pair protruding from the bundle on a first face thereof and another of the pair protruding from the bundle on a second face thereof. A clamp is applied to exposed portions of the second bodies at one of the bundle first and second faces, to force the second bodies into an attitude parallel to each other, the second bodies causing the first bodies to align parallel to the second bodies and parallel to each other. An outer ring of the first bodies is locked in place and a second plurality of first bodies is removed from the bundle. A plurality of optical fiber bearing ferrules is inserted in the place of the removed first bodies.

9 Claims, 4 Drawing Sheets